Contents Volume 68 (1992)

Vol. 68, Nos. 1+2 (April 10, 1992)

Behavior of water in perfluorinated ionomer membranes containing various monovalent cations
H. Yoshida and Y. Miura (Tokyo, Japan) 1
A new method for determining the diffusion coefficients of penetrants through polymeric membranes from steady state pervaporation experiments
C.K. Yeom and R.Y.M. Huang (Waterloo, Ont., Canada) 11
Dextran transport through asymmetric ultrafiltration membranes: Comparison with hydrodynamic models
S. Mochizuki and A.L. Zydney (Newark, DE, USA) 21
Ammonia permeabilities of perfluorosulfonic membranes in various ionic forms
Y. He and E.L. Cussler (Minneapolis, MN, USA) 43
Vapor permeation and pervaporation separation of water–ethanol mixtures through polyimide membranes
K. Okamoto, N. Tanihara, H. Watanabe, K. Tanaka, H. Kita (Yamaguchi, Japan), A. Nakamura, Y. Kusuki (Tokyo, Japan) and K. Nakagawa (Chiba, Japan) 53
The surface structure and morphology of polyvinylidene fluoride microfiltration membranes by atomic force microscopy
A.K. Fritzsche, A.R. Arevalo, M.D. Moore (Norwood, MA, USA), V.B. Elings, K. Kjoller and C.M. Wu (Santa Barbara, CA, USA) 65
Fouling mechanisms of membranes during protein ultrafiltration
K.J. Kim, A.G. Fane, C.J.D. Fell (Kensington, N.S.W., Australia) and D.C. Joy (Knoxville, TN, USA) 79
Modelling macromolecular diffusion through a porous medium
R.A. MacDonald (Gaithersburg, MD, USA) 93
Predicting permeate flux in ultrafiltration on the basis of surface renewal concept
A. Kołtuniewicz (Wrocław, Poland) 107
Comparison of the separation of mixtures by vapor permeation and by pervaporation using PVA composite membranes. I. Binary alcohol–water systems
B. Will and R.N. Lichtenthaler (Heidelberg, Germany) 119
Comparison of the separation of mixtures by vapor permeation and by pervaporation using PVA composite membranes. II. The binary systems ammonia–water, methylamine–water, 1-propanol–methanol and the ternary system 1-propanol–methanol–water
B. Will and R.N. Lichtenthaler (Heidelberg, Germany) 127
Radiation synthesis of ion-exchange carboxylic fluorine containing membranes
G.K. Kostov (Bourgas, Bulgaria), O. Matsuda, S. Machi and Y. Tabata (Gunma, Japan) 133
The separation of water and ethanol by pervaporation with PVA–PAN composite membranes
H. Ohya, K. Matsumoto, Y. Negishi, T. Hino (Yokohama, Japan) and H.S. Choi (Taegu, South Korea) 141
Effect of transmembrane pressure pulsing on concentration polarization
V.G.J. Rodgers and R.E. Sparks (St. Louis, MO, USA) 149
Effective diffusivity in W/O emulsion
M. Teramoto, H. Matsuyama and Y. Izumo (Kyoto, Japan) 169

Short Communication

Concentration effects on membrane sieving: development of a stagnant film model incorporating the effects of solute–solute interactions
A.L. Zydney (Newark, DE, USA) 183

Meetings Calendar 191

Vol. 68, No. 3 (April 15, 1992)

Special Issue: Selected papers presented at the 5th World Filtration Congress, Nice, France, June 5–8, 1990.

Guest Editorial 193
Ultrafiltration concentration of enzyme hydrolysates
R. Audinos and J.L. Branger (Toulouse, France) 195
Prediction of steady state crossflow filtration using a force balance model
N.J. Blake (Oxfordshire, UK), I.W. Cumming and M. Streat (Leicestershire, UK) 205
Polymeric membranes and coupled enzymes in the design of biosensors
P.R. Coulet (Villeurbanne, France) 217
Methods to improve flux during alcohol/water azeotrope separation by vapor permeation
A.E. Jansen, W.F. Versteeg, B. van Engelenburg, J.H. Hanemaaijer and B.Ph. ter Meulen (Zeist, Netherlands) 229
Improvement of crossflow microfiltration performances with flocculation
M. Mietton Peuchot (Toulouse, France) and R. Ben Aim (Compiègne, France) 241
Refractometric measurement of polarized layer structure: studies of hyaluronic acid ultrafiltration
C. Ross Ethier and D.C. Lin (Toronto, Ont., Canada) 249
Increase in the efficiency of membrane fractionation
N.N. Sudareva, O.I. Kurenbin and B.G. Belenkii (St. Petersburg, Russia) 263
Thermoporometry. Modelling and simulation of a mesoporous solid
C. Jallut, J. Lenoir, C. Bardot and C. Eyraud (Villeurbanne, France) 271
Recovery by electrodialysis of cyanide electroplating rinse waters
J.-M. Chiapello (Le Vesinet, France) and J.Y. Gal (Montpellier, France) 283
Direct heating of composite membranes in pervaporation and gas separation processes
R. Wnuk and H. Chmiel (Stuttgart, Germany) 293
Reverse osmosis of whey. Determination of mass transfer coefficients
E. Suárez, F. San Martín, R. Alvarez and J. Coca (Oviedo, Spain) 301
Development of new rod-type membranes for effluent decolorization: performance test on model dye solutions
K.M. Majewska-Nowak (Wrocław, Poland) 307

Meetings Calendar 319
Author Index Volume 68 (1992) 321
Subject Index Volume 68 (1992) 322